



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

January 14, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Citation Corporation / 033-17746-00016

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03



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Mr. Scott Irons
Citation Corporation
P.O. Box 80
Butler, Indiana 46271

Re: 033-17746
Fifth Significant Permit Revision to
FESOP 033-7938-00016

Dear Mr. Irons:

Citation Corporation, previously as Citation Bohn Aluminum Corporation, was issued a FESOP on January 26, 1999 to operate the secondary aluminum foundry and die casting plant located at 6378 U.S. Highway 6 West, Butler, Indiana, 46721. This street address has recently been changed by the City of Butler to 600 West Main Street, Butler, Indiana, 46721. A letter requesting a permit revision was received on July 28, 2003. Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision consists of changes to the existing compliance stack testing requirements for this source. The revision also incorporates the requirements of 40 CFR Part 63, Subpart RRR to the thirty-two (32) electric and natural gas fired holding furnaces at this source. This FESOP revision does not change the existing limit on the source-wide potential to emit of any regulated pollutant. Emissions from the source remain limited to less than 100 tons per year.

There is no new construction associated with this proposed project. The data and information supplied with the application shall be considered part of this significant permit revision approval.

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. A copy of the revised permit, with all prior revisions and amendments, is attached.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Michael Hirtler, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or at 973-575-2555, extension 3229, or in Indiana at 1-800-451-6027.

Sincerely,
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
MH / EVP

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6015
January 14, 2004

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c: File - DeKalb County
U.S. EPA, Region V
DeKalb County Health Department
IDEM Northern Regional Office
Air Compliance Section Inspector - Doyle Houser
Compliance Data Section - Karen Ampil
Administrative and Development
Technical Support and Modeling - Michele Boner



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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

**Citation Corporation
600 West Main Street
Butler, Indiana 46721**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 and 326 IAC 2-1-3.2, as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F033-7938-00016	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 26, 1999 Expiration Date: January 26, 2004

First Administrative Amendment: 033-14004-00016
First Significant Permit Revision: 033-14732-00016
Second Significant Permit Revision: 033-14858-00016
Third Significant Permit Revision: 033-15396-00016
Fourth Significant Permit Revision: 033-16754-00016

Issuance Date: May 14, 2001
Issuance Date: October 29, 2001
Issuance Date: January 4, 2002
Issuance Date: August 7, 2002
Issuance Date: June 24, 2003

Fifth Significant Permit Revision: 033-17746-00016	Pages Affected: 5-8, 26-46, 48, 49, 51-53
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 14, 2004

SECTION A	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-8-3(b)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]	
A.4	FESOP Applicability [326 IAC 2-8-2]	
A.5	Prior Permit Conditions	
SECTION B	GENERAL CONDITIONS	9
B.1	Permit No Defense [326 IAC 2-1-10] [IC 13]	
B.2	Definitions [326 IAC 2-8-1]	
B.3	Permit Term [326 IAC 2-8-4(2)]	
B.4	Enforceability [326 IAC 2-8-6]	
B.5	Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]	
B.6	Severability [326 IAC 2-8-4(4)]	
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	
B.8	Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]	
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.10	Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]	
B.11	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]	
B.12	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.13	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]	
B.14	Emergency Provisions [326 IAC 2-8-12]	
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]	
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]	
B.17	Permit Renewal [326 IAC 2-8-3(h)]	
B.18	Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]	
B.19	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)]	
B.20	Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]	
B.21	Operational Flexibility [326 IAC 2-8-15]	
B.22	Construction Permit Requirement [326 IAC 2]	
B.23	Inspection and Entry [326 IAC 2-8-5(a)(2)]	
B.24	Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]	
B.25	Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]	
SECTION C	SOURCE OPERATION CONDITIONS	20
	Emission Limitations and Standards [326 IAC 2-8-4(1)]	
C.1	Overall Source Limit [326 IAC 2-8]	
C.2	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]	
C.3	Opacity [326 IAC 5-1]	
C.4	Open Burning [326 IAC 4-1][IC 13-17-9]	
C.5	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Operation of Equipment [326 IAC 2-8-5(a)(4)]	
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]	
	Testing Requirements [326 IAC 2-8-4(3)]	
C.9	Performance Testing [326 IAC 3-6]	
	Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]	
C.10	Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]	

C.11 Monitoring Methods [326 IAC 3]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4]
[326 IAC 2-8-5][326 IAC 1-6]

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326
IAC 2-8-
5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 Monitoring Data Availability [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

Thirteen (13) Reverberatory Melt Furnaces, Metal Fluxing and Casting 28

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 PSD Minor and FESOP Limits [326 IAC 2-2][326 IAC 2-8]

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8][40 CFR 63, Subpart RRR]

D.1.3 Particulate [326 IAC 6-3-2]

D.1.4 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

D.1.5 Part 70 Permit Application [40 CFR Part 63.1500 (Subpart RRR)][326 IAC 2-7-4(a)]

D.1.6 Secondary Aluminum Production Limits [40 CFR Part 63, Subpart RRR]

D.1.7 Labeling [40 CFR Part 63.1506(b)]

D.1.8 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR Part 63.1510(b)]

D.1.9 Site-Specific Monitoring Plan [40 CFR Part 63.1510(o)]

D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

D.1.11 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11]

D.1.12 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11]
[40 CFR 63, Subpart RRR]

D.1.13 Feed/Charge Determination [40 CFR Part 63.1506(d)]

D.1.14 Secondary Aluminum Smelting Compliance Determination
[40 CFR Part 63, Subpart RRR]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.15 Visible Emissions Notations

D.1.16 Labeling [40 CFR Part 63.1510(c)]

D.1.17 Feed/Charge Determination [40 CFR Part 63.1510(e)]

D.1.18 Corrective Action [40 CFR Part 63.1506(p)]

D.1.19 Compliance Monitoring Requirements [40 CFR Part 63.1510(t)] [40 CFR Part 63.1510(u)]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.20 Record Keeping Requirements

D.1.21 Secondary Aluminum Production Record Keeping Requirements
[40 CFR Part 63, Subpart RRR]

D.1.22 Secondary Aluminum Production Reporting Requirements

[40 CFR Part 63, Subpart RRR]

D.1.23 Reporting Requirements

SECTION D.2 FACILITY OPERATION CONDITIONS

Insignificant Activities	46
 Emission Limitations and Standards [326 IAC 2-8-4(1)]	
D.2.1 Particulate [326 IAC 6-3-2]	
D.2.2 Volatile Organic Compounds (VOC)	
 Compliance Determination Requirements	
D.2.3 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]	
 Certification Form	48
Emergency/Deviation Occurrence Report Form	49
Quarterly Report Form (2 Forms)	51
Quarterly Compliance Monitoring Report Form	53

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary secondary aluminum foundry and die casting operation plant.

Responsible Official:	General Manager
Source Address:	600 West Main Street, Butler, Indiana 46721
Mailing Address:	P.O. Box 80, Butler, Indiana 46721
SIC Code:	3365,3363,3341
County Location:	DeKalb
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, to be installed in July 2002, equipped with four (4) natural gas fired burners rated at 9.2 million (MM) British thermal units (Btu) per hour total, exhausting through one (1) stack identified as E-1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, to be installed in July 2002, equipped with three (3) natural gas fired burners rated at 7.86 MMBtu per hour total, exhausting through one (1) stack identified as E-2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, to be installed in 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.

- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) reverberatory melt furnace identified as A12 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E-12.
- (m) One (1) reverberatory melt furnace identified as A13 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 MMBtu per hour total, exhausting through one (1) stack identified as E-13.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(1)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, as follows:
 - Two (2) natural gas-fired heat treat furnaces, individually identified as HT1 and HT2, each with a maximum heat input rating of 0.3 MMBTU per hour.
- (b) Combustion source flame safety purging pump.
- (c) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (d) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (e) Noncontact cooling tower systems with forced and induced draft cooling tower system not regulated under a NESHAP.

- (f) Quenching operations used with heat treating processes.
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (h) Heat exchanger cleaning and repair.
- (i) Process vessel degassing and cleaning to prepare for internal repairs.
- (j) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including:
 - (1) two (2) sawing and trimming operations for furnaces A1 through A13, excluding A3, individually identified as C-1 and C-2, processing up to a total of 3.8 tons aluminum per hour; and
 - (2) sawing and trimming operation for furnace A3 processing up to 3.0 tons aluminum per hour,utilizing two (2) cyclones for particulate matter control each exhausting through one (1) stack respectively identified as E-14 and E-15.
- (k) Paved and unpaved roads and parking lots with public access.
- (l) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (m) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (n) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees Celsius).
- (o) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (p) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day, including source casting operations as follows:
 - (1) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (2) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).
 - (3) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (4).

Citation Corporation
Butler, Indiana
Permit Reviewer: MH/EVP

Fifth Significant Permit Revision 033-17746
Revised by: MH / EVP

Page 9 of 61
F033-7938-00016

- (4) Holding furnaces used in source casting operations, including:
 - (A) Twenty-nine (29) "basic holding furnaces" performing additional molten metal degassing and rotofluxing as needed, including:
 - (1) Four (4) natural gas-fired holding furnaces respectively identified as S1 through S4, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal;
 - (2) One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal;
 - (3) Six (6) natural gas-fired holding furnaces respectively identified as Pots 7A, 7B, 8, 9, 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal;
 - (4) Eight (8) natural gas-fired holding furnaces respectively identified as Pots 15 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal;
 - (5) Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal.
 - (B) Three (3) "special holding furnaces" as follows:
 - (1) One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot; and
 - (2) Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable

requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-8-6]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

Such confidentiality claim shall meet the requirements of 40 CFR 2, Subpart B (when submitting to U.S. EPA) and 326 IAC 17 (when submitting to IDEM, OAQ).

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-8-11(b)(2)]

Notwithstanding 326 IAC 2-8-11(b)(1)(D)(i) and 326 IAC 2-8-11(c)(1), minor permit modification procedures may be used for modifications of this permit involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches to the extent that such minor permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated by U.S. EPA.

B.20 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-8-15(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional condition:

For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

B.21 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.22 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
[326 IAC 2-8-5(a)(4)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, *and* IDEM, OAQ, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.24 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-8-10]

Pursuant to 326 IAC 2-1-6 and 2-8-10:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-8-10. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) IDEM, OAQ shall reserve the right to issue a new permit.

B.25 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per three hundred sixty-five (365) consecutive day period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per three hundred sixty-five (365) consecutive day period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per three hundred sixty-five (365) consecutive day period.

(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.

- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notify:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed, according to the provisions of 326 IAC 3, or 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4]
[326 IAC 2-8-5][326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.

- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 Monitoring Data Availability [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative, for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner (or local agency) makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or local agency within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Descriptions [326 IAC 2-8-4(10)]:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, to be installed in July 2002, equipped with four (4) natural gas fired burners rated at 9.2 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, to be installed in July 2002, equipped with three (3) natural gas fired burners rated at 7.86 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, to be installed in 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total, exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) reverberatory melt furnace identified as A12 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E-12.
- (m) One (1) reverberatory melt furnace identified as A13 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 MMBtu per hour total, exhausting through one (1) stack identified as E-13.

The following insignificant activities, as defined in 326 IAC 2-7-1(21):

Source aluminum casting operations:

- (a) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, using holding furnaces listed in paragraph (d).
- (b) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (d).
- (c) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (d).

- (d) Holding furnaces used in source casting operations, including:
- (1) Twenty-nine (29) "basic holding furnaces" performing additional molten metal degassing and rotofluxing as needed, including:
- (A) Four (4) natural gas-fired holding furnaces respectively identified as S1 through S4, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal;
- (B) One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal;
- (C) Six (6) natural gas-fired holding furnaces respectively identified as Pots 7A, 7B, 8, 9, 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal;
- (D) Eight (8) natural gas-fired holding furnaces respectively identified as Pots 15 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal;
- (E) Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal.
- (2) Three (3) "special holding furnaces" as follows:
- (A) One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot; and
- (B) Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 PSD Minor and FESOP Limits [326 IAC 2-2] [326 IAC 2-8]

The source shall limit the total aluminum production in reverberatory melt furnaces A1 through A13 as follows:

- (a) The total aluminum produced in reverberatory furnaces A2, A3, A4, A6, A7, A8, A10, A11, and A12 shall not exceed 30,474 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month, based on the following:
- (1) PM emissions from each furnace shall not exceed 4.3 pounds of PM emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle; and
- (2) PM-10 emissions from each furnace shall not exceed 2.6 pounds of PM-10 emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle.

This material usage limit is equivalent to limiting PM and PM10 emissions to 65.52 and 39.62 tons per year, respectively.

- (b) The total aluminum produced in reverberatory furnaces A1, A5, A9, and A13 shall not exceed 15,942 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month, based on the following:

- (1) PM emissions from each furnace shall not exceed 3.0 pounds of PM emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle; and
- (2) PM-10 emissions from each furnace shall not exceed 2.6 pounds of PM-10 emitted per ton of metal produced which includes the aluminum refining (i.e., flux addition) stage at the end of the melt cycle.

This material usage limit is equivalent to limiting PM and PM10 emissions to 23.91 and 20.72 tons per year, respectively.

- (c) These usage limits are required to limit the source-wide potential to emit both PM and PM-10 to less than 100 tons per twelve (12) consecutive month period. Compliance with this condition shall satisfy the requirements of 326 IAC 2-8-4 and also make the requirements of 326 IAC 2-2 not applicable.

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8][40 CFR 63, Subpart RRR]

The Permittee shall limit flux usage as follows:

- (a) For chlorine-based fluxing:

- (1) The total hexachloroethane input usage at the source, including all reverberatory and holding furnaces, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (2) Hydrochloric acid (HCl) emissions from each furnace shall not exceed 0.924 pounds of HCl emitted per pound of hexachloroethane used, based on complete chemical conversion of chlorine in the hexachloroethane to HCl emitted.

This material usage limit is equivalent to limiting single HAP (as HCl) emissions to less than 10 tons per year.

- (b) For fluorine-based fluxing:

- (1) The total SF-350 type flux input usage at the source, including all reverberatory and holding furnaces, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (2) Hydrogen fluoride (HF) emissions from each furnace shall not exceed 0.2276 pounds of HF emitted per pound of flux used, based on a maximum of 21.614 weight percent fluorine in the flux and complete chemical conversion of fluorine in the flux to HF emitted. Any change that increases the fluorine content in the flux shall require OAQ approval prior to making such a change.

This material usage limit is equivalent to limiting single HAP (as HF) emissions to less than 10 tons per year.

- (c) These usage limits are required to limit the potential to emit of a single HAP to less than 10 tons per twelve (12) consecutive month period. Compliance with (a) and (b) of this condition shall also limit the source-wide potential to emit combined HAPs to less than 25 tons per 12 consecutive month period. Compliance with this condition shall satisfy the requirements of 326 IAC 2-8-4 and the area source definition of 40 CFR 63, Subpart A.

Citation Corporation
Butler, Indiana
Permit Reviewer: MH/EVP

Fifth Significant Permit Revision 033-17746
Revised by: MH / EVP

Page 34 of 61
F033-7938-00016

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities listed below shall be limited as specified when operating at the respective process weight:

Emission Unit/Activity	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (lb/hr) (326 IAC 6-3-2)
reverberatory furnace A1	3.83	10.08
reverberatory furnace A2	3.28	9.09
reverberatory furnace A3	6.00	13.62
reverberatory furnace A4	1.25	4.76
reverberatory furnace A5	1.25	4.76
reverberatory furnace A6	1.25	4.76
reverberatory furnace A7	1.00	4.10
reverberatory furnace A8	0.25	1.08
reverberatory furnace A9	2.50	7.58
reverberatory furnace A10	2.50	7.58
reverberatory furnace A11	0.90	3.82
reverberatory furnace A12	3.50	9.49
reverberatory furnace A13	3.50	9.49
pouring and casting operation for furnaces A1 through A11 (excluding A3)	18.01	28.44
FLCA pouring and casting operation for furnace A3	6.00	13.61
ME Cell pouring and casting operation for furnaces A12 & A13	7.00	15.10

The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.4 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the reverberatory and holding furnaces, each as a Group 1 furnace, except when otherwise specified in 40 CFR Part 63, Subpart RRR. These requirements become applicable to the Group 1 furnaces, excluding A3, on March 24, 2003. These requirements become applicable to reverberatory furnace A3 upon startup. Compliance with D.1.2 makes this source an area source under Clean Air Act Section 112. Therefore, only the area source requirements of Subpart RRR apply to these facilities.

D.1.5 Part 70 Permit Application [40 CFR Part 63.1500 (Subpart RRR)][326 IAC 2-7-4(a)]

Pursuant to 40 CFR 63.1500(e) and 326 IAC 2-7-4(a), the Permittee shall apply for a Part 70 operating permit no later than December 9, 2005.

D.1.6 Secondary Aluminum Production Limits [40 CFR Part 63, Subpart RRR]

Effective March 23, 2004 for reverberatory furnaces A1, A2, A4 through A13, and each natural gas fired and electric holding furnaces; and upon startup for reverberatory furnace A3, and pursuant to 40 CFR 63.1505(k), the Permittee shall comply with the following emission limitations:

- (a) Pursuant to 40 CFR 1505(k)(3), for each secondary aluminum processing unit, the Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of:

$$L_{cDF} = \frac{\sum_{i=1}^n (L_{iDF} T_{ii})}{\sum_{i=1}^n (T_{ii})}$$

where L_{iDF} = The D/F emission limit for individual Group 1 furnace "i", in the secondary aluminum processing unit. This limit shall be 15 Fg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge or per ton of aluminum produced for each Group 1 furnace (i.e., each of the reverberatory and holding furnaces), where TEQ is the toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzop-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update"; [40 CFR 63.1503][40 CFR 63.1505(i)]
[40 CFR 63.1505(k)]

T_{ii} = the feed/charge rate for individual Group 1 furnace "i"; and

L_{cDF} = The D/F emission limit for each secondary aluminum processing unit.

- (b) Pursuant to 40 CFR 63.1505(k)(5), the Permittee may demonstrate compliance with the emission limits of paragraph (a) by demonstrating that each Group 1 furnace in the secondary aluminum processing unit is in compliance with the applicable emission limit for an individual Group 1 furnace specified as L_{iDF} in paragraph (a) of this condition.

- (c) With prior approval from IDEM, Permittee may redesignate any existing Group 1 furnace at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of 40 CFR Part 63, Subpart RRR and will be irreversible.

D.1.7 Labeling [40 CFR Part 63.1506(b)]

The Permittee shall provide and maintain easily visible labels that shall be posted at each reverberatory and holding furnace. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) The type of affected source or emission unit (e.g., group 1 furnace, group 2 furnace, in-line fluxer); and
- (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

D.1.8 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR Part 63.1510(b)]

The Permittee shall prepare and implement a written Operation, Maintenance, and Monitoring (OM&M) plan for each reverberatory and holding furnace and shall submit the plan to IDEM, OAQ, for review and approval. The OM&M plan shall be submitted by the compliance date established at 40 CFR Part 63.1501(a) for the existing furnaces, and within ninety (90) days of the successful initial performance test for new furnace A3. The plan must be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR Part 63.1510 and is otherwise consistent with the requirements of 40 CFR Part 63, Subpart RRR. The Permittee must comply with all of the provisions of the OM&M plan as submitted to IDEM, unless and until the plan is revised in accordance with the following procedures. If IDEM determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR Part 63.1510 or Subpart RRR, the Permittee must promptly make all necessary revisions and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to IDEM. Each plan must contain the following information:

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for each affected source and emission unit.
- (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in 40 CFR Part 63.1505.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and

Citation Corporation
Butler, Indiana
Permit Reviewer: MH/EVP

Fifth Significant Permit Revision 033-17746
Revised by: MH / EVP

Page 38 of 61
F033-7938-00016

- (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in 40 CFR 63, Subpart A.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (a) of this condition, including:
 - (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (h) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in 40 CFR Part 63.1510(o) for each group 1 furnace not equipped with an add-on air pollution control device (i.e., reverberatory furnaces A1 through A13 and the holding furnaces).

D.1.9 Site-Specific Monitoring Plan [40 CFR Part 63.1510(o)]

The Permittee shall develop, in consultation with IDEM, OAQ, a written site-specific monitoring plan for each furnace not equipped with an add-on air pollution control device (i.e., reverberatory furnaces A1 through A13 and the holding furnaces). The site-specific monitoring plan shall be submitted to IDEM, OAQ, as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for that pollutant. Test data must establish the highest level of D/F that will be emitted from each furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If IDEM, OAQ, determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the Permittee must promptly make all necessary revisions and resubmit the revised plan to IDEM, OAQ. The site-specific monitoring plan shall include the following information:

- (a) Each site-specific monitoring plan shall document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
- (b) Each site-specific monitoring plan shall include provisions for unit labeling as required in 40 CFR Part 63.1510(c), feed/charge weight measurement (or production weight measurement) as required in 40 CFR Part 63.1510(e), and flux weight measurement as required in 40 CFR Part 63.1510(j).

- (c) If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan shall include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in 40 CFR 63, Subpart A.
- (d) If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan shall include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of this subpart.
- (e) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan shall include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40 CFR Part 63.1510(p).
- (f) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan shall include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in 40 CFR Part 63.1510(q).

D.1.10 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices. If the OM&M and site-specific plans required by Conditions D.1.8 and D.1.9 are developed in accordance with Section B - Preventive Maintenance Plans, then after the plans have been approved, they shall satisfy the requirements of this condition.

Compliance Determination Requirements

D.1.11 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.3, the following shall apply:

- (a) For purposes of PM and PM₁₀ compliance stack testing, the thirteen (13) furnaces at this source are grouped as follows:

Group A:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A8	0.25	2.5 (1 burner)
A11	0.9	15.9 (6 burners, total)
A7	1.0	5.2 (2 burners, total)

Group B:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A4	1.25	10.05 (3 burners, total)
A5	1.25	6.7 (2 burners, total)
A6	1.25	10.05 (3 burners, total)

Group C:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A9	2.5	10.6 (4 burners, total)
A10	2.5	9.0 (6 burners, total)
A2	3.28	9.2 (4 burners, total)

A12 3.5 12.5 (2 burners, total)

Group D:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A13	3.5	12.5 (2 burners, total)
A1	3.83	9.2 (4 burners, total)
A3	6.0	24.2 (2 burners, total)

- (b) The Permittee shall perform PM and PM10 testing on one (1) furnace from each of Groups A, B, C and D by March 31, 2004. The tests shall be conducted during metal melting and metal fluxing utilizing methods as approved by the Commissioner. This test shall be repeated every twenty-one (21) months from the date of the prior valid compliance demonstration, but shall not be repeated on any one (1) furnace in a group until all furnaces in the respective group are tested. The first complete test of all furnaces in Groups B and C shall not include furnaces A5 and A9, respectively.

D.1.12 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11][40 CFR 63, Subpart RRR]

In order to demonstrate compliance with Condition D.1.6 and 40 CFR 63, Subpart RRR, the Permittee shall:

- (a) For existing reverberatory furnaces, perform D/F testing by the 40 CFR Part 63.1501(a) compliance date (i.e., March 24, 2003), and no later than one-hundred eighty (180) days after initial startup for new facilities, in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Commissioner to measure the concentration of D/F. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) For existing holding furnaces, perform D/F testing by the 40 CFR Part 63.1501(a) compliance date (i.e., March 24, 2003), and no later than one-hundred eighty (180) days after initial startup for new facilities, in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Commissioner to measure the concentration of D/F. Testing shall be conducted in accordance with Section C - Performance Testing.
- (c) With the prior approval of IDEM, the Permittee may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied [40 CFR 63.1511(f)]:
- (1) The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;
 - (2) The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;
 - (3) The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;

- (4) The tested emission unit must be of the same design as the emission units that it represents; and

- (5) The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.
- (d) The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. To establish the minimum or maximum value or range, the Permittee shall use the appropriate procedures in 40 CFR 63.1511(g) and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met. [40 CFR 63.1511(g)]
- (e) Pursuant to 40 CFR 63.1512(e), the site-specific monitoring plan required by 40 CFR 63.1510(o) and Condition D.1.10 shall include data and information demonstrating compliance with the applicable emission limits for each Group 1 furnace (i.e., each reverberatory and holding furnace).
- (f) Pursuant to 40 CFR 63.1512(j), the results of the performance tests required by paragraph (a) of this condition shall be used to establish emission rates in Fg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).
- (g) Pursuant to paragraphs (k) and (n) of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of 40 CFR 63.1512 respectively for:
 - (1) Measuring or otherwise determining feed/charge weight to the affected emission unit (i.e., each of the reverberatory and holding furnaces); and
 - (2) Establishing an operating parameter value or range for the total reactive chlorine flux injection rate.
- (g) Pursuant to Paragraphs (b), (d), and (e) of 40 CFR 63.1513, the Permittee shall comply with the requirements and use the applicable equations, references, and/or procedures in these sections of 40 CFR 63.1513 respectively for:
 - (1) Determining compliance with an emission limit for D/F;
 - (2) Conversion of D/F measurements to TEQ units; and
 - (3) Determining compliance with emission limits for a secondary aluminum processing unit.

D.1.13 Feed/Charge Determination [40 CFR Part 63.1506(d)]

Pursuant to 40 CFR 63.1506, the Permittee shall install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test. The Permittee shall operate each measurement system or other weight determination procedure in accordance with the Operation, Maintenance, and Monitoring Plan. Alternatively, the Permittee may choose to measure and record aluminum production weight from an affected emission unit rather than feed/charge weight provided that the aluminum production weight is measured for all emission units within a secondary aluminum processing unit and all calculations to demonstrate compliance with the emission limits for

secondary aluminum processing units are based on aluminum production weight rather than feed/charge weight.

D.1.14 Secondary Aluminum Smelting Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to each reverberatory and holding furnace:

- (a) For each furnace, the Permittee shall [63.1506(m)]:
 - (1) Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
 - (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the Operation, Maintenance, and Monitoring (OM&M) plan and within the parameter values or ranges established in the OM&M plan.
- (b) Pursuant to 40 CFR 63.1510(j), for each furnace the Permittee shall comply as follows:
 - (1) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux.
 - (2) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(o).
 - (3) The Permittee may apply to IDEM for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- (c) Pursuant to 40 CFR 63.1510(s)(1), the Permittee shall include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:
 - (1) The identification of each emission unit in the secondary aluminum processing unit (SAPU);
 - (2) The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application;
 - (3) The emission limit calculated for each SAPU and performance test result with supporting calculations demonstrating initial compliance with each applicable emission limit;
 - (4) Information and data demonstrating compliance for each emission unit with all applicable design equipment work practice or operational standards of Subpart RRR; and

- (5) The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t).

- (d) The SAPU compliance procedures within the OM&M plan shall not contain any of the information provided in 40 CFR 63.1510(s)(2)(i) through (iv). [40 CFR 63.1510(s)(2)]
- (e) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the Permittee must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions. [40 CFR 61.1510(s)(3)]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.15 Visible Emissions Notations

- (a) Visible emission notations of the reverberatory melt furnaces' exhaust stacks (E-1 through E-13) shall be performed once per shift during normal daylight operations when metal melting and fluxing is occurring and when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.16 Labeling [40 CFR Part 63.1510(c)]

The Permittee shall inspect the labels for each furnace required by Condition D.1.7 at least once per calendar month to confirm that posted labels as required by the operational standard in 40 CFR Part 63.1506(b) are intact and legible.

D.1.17 Feed/Charge Determination [40 CFR Part 63.1510(e)]

The Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, each furnace over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the Permittee may use a procedure acceptable to IDEM to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

- (a) The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured. The Permittee may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standard.

- (b) The Permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

D.1.18 Corrective Action [40 CFR Part 63.1506(p)]

When a process parameter deviates from the value or range established during the performance test and incorporated in the Operation, Maintenance, and Monitoring Plan, the Permittee shall initiate corrective action. The corrective action shall restore operation of the affected emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of the deviation.

D.1.19 Compliance Monitoring Requirements [40 CFR Part 63.1510(t)] [40 CFR Part 63.1510(u)]

Pursuant to 40 CFR Subpart RRR, on and after the compliance date, the Permittee shall monitor all emission units and control equipment according to the following requirements [40 CFR Part 63.1510(a)]:

- (a) The Permittee shall calculate and record the 3-day, 24- hour rolling average emissions of D/F for each furnace on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall [40 CFR Part 63.1510(t)]:
- (1) Calculate and record the total weight of material charged to each furnace for each twenty-four- (24-) hour day of operation using the feed/charge weight data collected as required under Subpart RRR. If the Permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.
 - (2) To provide emissions for each furnace for the twenty-four- (24-) hour period, in pounds: multiply the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the twenty-four- (24-) hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the emission test).
 - (3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.
 - (4) Compute the 24-hour daily emission rate using the following equation:

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n (T_i)}$$

where,

E_{day} = The daily D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

T_i = The total amount of feed, or aluminum produced, for emission unit "i" for the 24-hour period (tons);

ER_i = The measured emission rate for emission unit "i" as determined in the performance test (lb/ton or $\mu\text{g}/\text{Mg}$ of feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

- (5) Calculate and record the three- (3-) day, twenty-four- (24-) hour rolling average for each pollutant each day by summing the daily emission rates for D/F over the three (3) most recent consecutive days and dividing by three (3).
- (b) As an alternative to the procedures in (a) above, the Permittee may demonstrate through performance tests, that each individual furnace within the secondary aluminum production unit is in compliance with the applicable emission limit [40 CFR 63.1510(u)].

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.20 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) and (3) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Total aluminum produced in furnaces A2, A3, A4, A6, A7, A8, and A10 - A12 for each month; and
 - (3) Total aluminum produced in furnaces A1, A5, A9, and A13 for each month.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) and (4) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Total hexachloroethane input usage at the source for each month;
 - (3) Total SF-350 type flux input usage at the source for each month; and
 - (4) The total weight of HCl and HF, each as a single HAP, emitted for each compliance period. This determination shall be based on complete (100%) chemical conversion of chlorine in the hexachloroethane in the flux to HCl emitted, and complete (100%) chemical conversion of fluorine in the flux to HF emitted based on 21.614 weight percent fluorine in the flux.
- (c) To document compliance with Condition D.1.15, the Permittee shall maintain records of once per shift visible emission notations of the reverberatory melt furnace exhaust stacks.

- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.21 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]
Pursuant to 40 CFR Part 63.1517, the Permittee shall:

- (a) As required by 40 CFR 63.10(b), the Permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and 40 CFR Part 63, Subpart RRR.
- (b) The Permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The Permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the Permittee of an affected unit, including an emission unit in a secondary aluminum processing unit (i.e., furnaces A1 through A13 and the holding furnaces) must maintain records of:
 - (1) For each group 1 furnace at this source, records of 15-minute block average weights of total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
 - (2) For each continuous monitoring system, records required by 40 CFR 63.10(c).
 - (3) For each furnace as a unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
 - (4) Approved site-specific monitoring plan for each furnace, as a group 1 furnace without an add-on pollution control device, with records documenting conformance with the plan.
 - (5) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - (6) Records for any approved alternative monitoring or test procedure.
 - (7) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (A) Startup, shutdown, and malfunction plan;
 - (B) For major sources, OM&M plan; and
 - (C) Site-specific secondary aluminum processing unit emission plan.

- (8) For each secondary aluminum processing unit, records of total charge weight, or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

D.1.22 Secondary Aluminum Production Reporting Requirements [40 CFR Part 63, Subpart RRR]

- (a) Pursuant to 40 CFR 63.1510 and 63.1516, the Permittee shall provide notification of the anticipated date for conducting performance tests. The Permittee shall notify IDEM, OAQ, of the intent to conduct a performance test at least 60 days before the performance test is scheduled.
- (b) Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status report within 60 days after the compliance date specified in 40 CFR 63.1501, except within 90 days after conducting the initial performance test required by 40 CFR Part 63.1511(b) for new furnace A3. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (1) through (10) below. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the Permittee must provide duplicate notification to the applicable Regional Administrator. If a Permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
- (1) All information required in 40 CFR 63.9(h). The Permittee shall provide a complete performance test report for each furnace for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
- (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.
- (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
- (4) The compliant operating parameter value or range established for each furnace as listed at Condition D.1.12(f), with supporting documentation and a description of the procedure used to establish the value, including the operating cycle or time period used in the performance test.
- (5) If applicable, design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
- (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
- (7) Approved OM&M plan.

- (8) Startup, shutdown, and malfunction plan, with revisions.
- (c) The Permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The Permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include [40 CFR 63.1516(a)]:
 - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The Permittee shall submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the Permittee must submit a report stating that no excess emissions occurred during the reporting period [40 CFR 63.1516(b)].

A report must be submitted if any of these conditions occur during a 6-month reporting period:

 - (1) An excursion of a compliant process or operating parameter value or range, as listed at Condition D.1.12((f)).
 - (2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
 - (3) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of 40 CFR 63, Subpart RRR.
 - (4) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (e) The Permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested [40 CFR 63.1516(b)].
- (f) For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the Permittee shall certify continuing compliance based upon, but not limited to, the following conditions [40 CFR 63.1516(c)]:
 - (1) Any period of excess emissions, as defined in the semiannual report, that occurred during the year were reported as required by this subpart; and

- (2) All monitoring, record keeping, and reporting requirements were met during the year.

D.1.23 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the calendar quarter being reported.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Descriptions [326 IAC 2-8-4(10)]: The following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including:
 - (1) two (2) sawing and trimming operations for furnaces A1 through A13, excluding A3, individually identified as C-1 and C-2, processing up to a total of 3.8 tons aluminum per hour; and
 - (2) sawing and trimming operation for furnace A3 processing up to 3.0 tons aluminum per hour,utilizing two (2) cyclones for particulate matter control each exhausting through one (1) stack respectively identified as E-14 and E-15.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing and trimming operations identified as C-1 and C-2 shall not exceed 10.0 pounds per hour when operating at a process weight rate of 3.8 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing and trimming operation for furnace A3 shall not exceed 8.6 pounds per hour when operating at a process weight rate of 3.0 tons per hour.
- (c) The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

- (a) Equip the cleaner with a cover;

- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the particulate limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no applicable compliance monitoring conditions for these facilities.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

There are no specific record keeping or reporting requirements for these facilities.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
FESOP No.: F033-7938-00016

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
FESOP No.: F033-7938-00016

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

- 9 1.** This is an emergency as defined in 326 IAC 2-7-1(12)
 (The Permittee must notify the Office of Air Quality (OAQ), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 (The Permittee must submit notice in writing or by facsimile within two **(2)** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9 2.** This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
 (The Permittee must submit notice in writing within ten **(10)** calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

Citation Corporation
Butler, Indiana
Permit Reviewer: MH/EVP

Fifth Significant Permit Revision 033-17746
Revised by: MH / EVP

Page 57 of 61
F033-7938-00016

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:

Date/Time Emergency/Deviation was corrected:

Was the facility being properly operated at the time of the emergency/deviation? Y N
Describe:

Type of Pollutants Emitted: TSP, PM-10, SO₂, VOC, NO_x, CO, Pb, other:

Estimated amount of pollutant(s) emitted during emergency/deviation:

Describe the steps taken to mitigate the problem:

Describe the corrective actions/response steps taken:

Describe the measures taken to minimize emissions:

If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Citation Bohn Aluminum Corp.
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
FESOP No.: F033-7938-00016
Facility: Reverberatory melt furnaces A1 through A13
Parameter: Aluminum produced
Limit (a) total aluminum produced in reverberatory furnaces A2, A3, A4, A6, A7, A8, A10, A11, and A12 shall not exceed 30,474 tons per 12 consecutive month period with compliance determined at the end of each month
(b) total aluminum produced in reverberatory furnaces A1, A5, A9, and A13 shall not exceed 15,942 tons per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Aluminum Produced This Month (tons)		Aluminum Produced Previous 11 Months (tons)		12 Month Aluminum Produced (tons)	
	A2, A3, A4, A6, A7, A8, A10, A11, A12(total)	A1, A5, A9, A13 (total)	A2, A3, A4, A6, A7, A8, A10, A11, A12(total)	A1, A5, A9, A13 (total)	A2, A3, A4, A6, A7, A8, A10, A11, A12(total)	A1, A5, A9, A13 (total)
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
FESOP No.: F033-7938-00016
Facility: All reverberatory and holding furnaces
Parameter: Hexachloroethane input usage in the fluxing process; and SF-350 type flux input usage
Limit: (a) For chlorine-based fluxing:
The total hexachloroethane input usage at the source, including all reverberatory and holding furnaces, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
(b) For fluorine-based fluxing:
The total SF-350 type flux input usage at the source, including all reverberatory and holding furnaces, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

YEAR: _____

Month	Flux Input Usage at Source This Month (tons)		Flux Input Usage at Source Previous 11 Months (tons)		12 Month Flux Input Usage at Source (tons)	
	hexachloroethane	SF-350 flux	hexachloroethane	SF-350 flux	hexachloroethane	SF-350 flux
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Citation Corporation
Source Address: 600 West Main Street, Butler, IN 46721
Mailing Address: P.O. Box 80, Butler, IN 46721
FESOP No.: F033-7938-00016

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.15)	Number of Deviations	Date of each Deviations

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Name:	Citation Corporation
Source Location:	600 West Main Street, Butler, Indiana 46721
County:	DeKalb
SIC Code:	3365,3363,3341
Operation Permit No.:	F033-7938-00016
Operation Permit Issuance Date:	January 26, 1999
Significant Permit Revision No.:	033-17746-00016
Permit Reviewer:	Michael Hirtler / EVP

On October 30, 2003, the Office of Air Quality (OAQ) had a notice published in the Auburn Evening Star, in Auburn, Indiana, stating that Citation Corporation had applied for a Significant Permit Revision (SPR) to their FESOP to revise the existing stack testing requirement for their existing secondary aluminum foundry and die casting source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 26, 2003, OAQ received comments from Citation Corporation in relation to the proposed permit. Additionally, on October 20, 2003, prior to the start of the 30-day notice period, OAQ received comments from Citation Corporation's environmental consultant, Gabbard Environmental Services, Inc. These comments were not addressed prior to the commencement of the 30-day notice period and are addressed herein. The summary of the comments and related responses follows. Any changes made to the permit as a result of the following comments are shown in bold and deleted permit language is shown with a line through it. Permit changes affecting the permit's Table of Contents are also revised without replication herein.

Comment 1:

The source name has changed from "Citation Bohn Aluminum Corporation" to "Citation Corporation". There is no change in ownership due to this name change. Also, the City of Butler annexed the plant property during calendar year 2002, resulting in a new street address for the plant as "600 West Main Street".

Response to Comment 1:

The permit is revised at Section A.1, the permit cover page, the permit header, and the permit reporting forms to change the source name from "Citation Bohn Aluminum Corporation" to "Citation Corporation", and to revised the street address from "6378 U.S. Highway 6 West" to "600 West Main Street". These changes are made without replication herein.

Comment 2:

Work is underway on a revision to the plant air permit (i.e., this significant permit revision) which will incorporate a new schedule for conducting stack test work. We are concerned that the approach of winter weather conditions and other considerations may impact the current testing deadline of December 24, 2003. We would appreciate your cooperation in extending the deadline for compliance testing to March 31, 2004.

Response to Comment 2:

On September 2, 2003, IDEM, OAQ, Air Compliance Branch, issued a letter to the Permittee approving their request to extend the time to complete requisite PM/PM10 emissions testing on the thirteen (13) reverberatory furnaces, and dioxan/furance (D/F) emissions testing on reverberatory furnace A3. The approval requires the Permittee to complete such testing by no later than December 24, 2003. This date is consistent with 40 CFR Part 63.7(a)(2)(iii), which requires compliance testing to be performed for a new unit (as furnace A3) within one-hundred and eighty (180) days after initial startup.

In regards to D/F testing, IDEM cannot approve a time extension for testing beyond December 24, 2003 since this date is based on the above cited federal rule. IDEM acknowledges that the Permittee submitted a request to U.S. EPA on December 19, 2003 to extend the time to conduct the D/F testing, and this request remains outstanding. Nonetheless, for purposes of this approval the deadline for testing remains unchanged; however, a minor revision is made to Condition D.1.12(a) to make the requirement more consistent with 40 CFR Part 63, Subpart RRR. The revision is presented below under the Response to Comment 3.

In regards to PM/PM10 testing, IDEM, OAQ, Air Compliance Branch, has decided to approve the request to extend the test deadline until March 31, 2004, as requested. Condition D.1.11(b) is revised as shown below under the Response to Comment 3.

For the holding furnaces, although the requirements of Subpart RRR are newly incorporated into this permit as discussed in Comment 3 below, these are existing units and 40 CFR 63.1511 required an initial performance test to have been conducted by the March 24, 2003 rule compliance date. IDEM is reviewing this matter and will take the appropriate action. This notwithstanding, IDEM acknowledges that the Permittee submitted a request to U.S. EPA on December 19, 2003 to extend the time to conduct the D/F testing, and this request remains outstanding. Nonetheless, for purposes of this approval the deadline for testing is consistent with that of 40 CFR 63, Subpart RRR, as reflected in the revision to Condition D.1.12(a) presented below under the **Response to Comment 3**.

Comment 3:

The source has requested clarification on the applicability of those existing permit conditions pertaining to the requirements of 40 CFR Part 63, Subpart RRR (National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production), in relation to the miscellaneous natural gas and electric holding furnaces at the source. Such equipment is considered an insignificant activity and is contained in the permit at Section A.3.

Response to Comment 3:

Significant Permit Revision (SPR) No. 033-16754-00016 was issued to this source on June 24, 2003. In addition to providing approval for new emission units, SPR No. 033-16754 also incorporated the applicable requirements of 40 CFR Part 63 Subpart RRR (National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production) into the permit. While it was determined that the requirements of Subpart RRR apply to the thirteen (13) reverberatory furnaces at this source, a similar determination was not made for the miscellaneous electric and natural gas fired holding furnaces at this source. Information provided by the applicant indicated that these units were not used for metal processing. They were used solely to transfer molten aluminum from the reverberatory furnaces to casting. Based on this process information, IDEM concluded that the units did not meet the definition of a Group 1 furnace or melting/holding furnace.

The above notwithstanding, IDEM requested the applicant to re-confirm the operation of the holding furnaces. In response to this request, a detailed operational description was provided and is summarized as follows:

- (a) The source conducts charging/melting/refining (fluxing & degassing) in the 13 reverberatory furnaces, each of which is subject to Subpart RRR as reflected in the existing FESOP.
- (b) Molten metal is transferred from the reverberatory furnaces to the subject molten metal holding units. The source considers these holding units to be part of the die casting operation. There are two (2) categories of holding units, "basic" and "special". There are thirty-two (29) "basic" units and three (3) "special" units at the source and they operate as follows:
 - (1) The "basic" units receive molten metal from the reverberatory furnaces via an overhead conveyor line transfer ladle, and then they hold the molten metal at +1300EF as the casting wheel rotates into position and then the molten metal is transferred to a mold. Product quality specifications may require last minute casting station metal treatment, where degassing, refluxing, or both may occur at a holding unit before metal transfer to the mold.
 - (2) The "special" units receive molten metal from the reverberatory furnaces via gravity. The "special" units have 3 sections: receiving-holding, electric heat transfer, and pouring-holding supply. The "receiving-holding" section receives molten metal via gravity from the reverberatory furnace, and it is equipped with a spinning agitator to promote metal consistency and to inject an inert gas through the agitator head (degassing). Product quality specifications may require refluxing at the "receiving-holding" section. Molten metal then flows via gravity through the "electric heat transfer" section to the "pouring-holding supply" section, where it is then transferred to a mold as the casting wheel rotates.

Although the above indicates additional metal processing can occur in these holding units, they are nonetheless used to facilitate molten metal transfer to casting, which meets the exclusionary language included in the definition of a Group 1 melting/holding furnace, pursuant to 40 CFR Part 63.1503, *Definitions*. As such, IDEM decided to submit a request to U.S. EPA to clarify whether the requirements of 40 CFR Part 63, Subpart RRR are applicable to the miscellaneous electric and natural gas fired holding units. This request was submitted by IDEM to U.S. EPA on November 11, 2003.

Citation Corporation
Butler, Indiana
Permit Reviewer: MH/EVP

Page 4 of 28
Significant Permit Revision No. 033-17746-00016

On November 12, 2003, U.S. EPA issued an applicability determination on the aforementioned request. Based on a review of the above process information, EPA concluded that the holding furnaces ("basic" and "special") are subject to applicable requirements of 40 CFR 63, Subpart RRR. This decision is based on the fact that these units are used to hold the molten metal at an elevated temperature; and the processes of agitation, degassing, and fluxing are conducted in these units. EPA believes these actions meet the rule's applicability criteria for an affected furnace. Based on this decision, IDEM has concluded that these units are Group 1 furnaces pursuant to the definition of such per 40 CFR Part 63.1503.

The above decision by EPA does not affect this source's status as an area source, as defined at 40 CFR 63.2. Pursuant to 40 CFR 63.1500(f), *Applicability*; FESOP No. 033-7938-00016, issued on January 6, 1999; and subsequent approvals, particularly SPR No. 033-16754, issued on June 24, 2003, this source is considered as an area source because the permit has an established limit on flux usage such that the potential to emit a single HAP and the combination of HAPs is limited to less than 10 and 25 tons per year, respectively. The applicability of Subpart RRR to the holding furnaces does not change this area source status, as quarterly flux usage reported by the Permittee is reflective of source-wide flux usage. This has been confirmed by the Permittee. Therefore, only a descriptive change is made to the flux usage limit of this permit at Condition D.1.2 (see below).

Based on the above, the permit is revised to include the holding furnaces as follows. The existing listing of these units in Sections A.3(a) and (q) are replaced with Section A.3(p)(4). This revised listing is intended to be more descriptively complete and no new furnaces are added due to this revision. Moreover, due to a simplification of its pouring/casting operation, the Permittee has indicated the previously listed total of fifty-one (51) electric/natural gas holding furnaces has been reduced to thirty-two (32) furnaces. In addition to these descriptive changes, the permit is revised throughout Section D.1 to include the holding furnaces at those existing permit conditions pertaining to 40 CFR Part 63, Subpart RRR. Further, the casting operation which includes the holding units is moved from existing Section D.2 to Section D.1. Also, language is revised at some Subpart RRR conditions in Section D.1 to make the requirements more consistent with the rule. This includes elimination of language when such is not specifically applicable to this source (e.g., existing D.1.14(b)(1) and (2), which are deleted since this source uses only solid reactive flux and does not use gaseous nor liquid reactive flux).

Based on the above discussion, IDEM, OAQ has revised the permit at Sections A.3, D.1 and D.2 as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, as follows:
 - (1) ~~Eighteen (18) natural gas-fired crucible holding furnaces, individually identified as HF1, HF2, HF15 through HF24, and HF28 through HF33, with a total combined maximum heat input rating of 9.5 MMBtu per hour;~~
 - (2) ~~Four (4) natural gas-fired reverberatory holding furnaces, individually identified as S1, S2, S3, and S4, each with a maximum heat input rating of 5.8 MMBtu per hour;~~

- ~~(3) Two (2) natural gas-fired reverberatory holding furnaces, individually identified as H1 and H2, each with a maximum heat input rating of 1.48 MMBtu per hour and exhausting through one (1) stack identified as E-H; and~~
 - ~~(4)~~ Two (2) natural gas-fired heat treat furnaces, individually identified as HT1 and HT2, each with a maximum heat input rating of 0.3 MMBTU per hour.
- (p) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day, **including source casting operations:**
- (1) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, **using holding furnaces listed in paragraph (4).**
 - (2) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, **using holding furnaces listed in paragraph (4).**
 - (3) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, **using holding furnaces listed in paragraph (4).**
 - (4) **Holding furnaces used in source casting operations, including:**
 - (A) **Twenty-nine (29) “basic holding furnaces” performing additional molten metal degassing and rotofluxing as needed, including:**
 - (1) **Four (4) natural gas-fired holding furnaces respectively identified as S1 through S4, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal;**
 - (2) **One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal;**
 - (3) **Six (6) natural gas-fired holding furnaces respectively identified as Pots 7A, 7B, 8, 9, 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal;**
 - (4) **Eight (8) natural gas-fired holding furnaces respectively identified as Pots 15 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal;**

- (5) Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal.

(B) Three (3) "special holding furnaces" as follows:

- (1) One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot; and
- (2) Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot.

~~(g) Twenty-three (23) electric crucible holding furnaces identified as HF3, HF7a, HF7b, HF8, HF14, and HF34 through HF43.~~

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Descriptions [326 IAC 2-8-4(10)]:

- (a) One (1) reverberatory melt furnace identified as A1 with a maximum melt capacity of 3.83 tons of aluminum per hour, to be installed in July 2002, equipped with four (4) natural gas fired burners rated at 9.2 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E1.
- (b) One (1) reverberatory melt furnace identified as A2 with a maximum melt capacity of 3.28 tons of aluminum per hour, to be installed in July 2002, equipped with three (3) natural gas fired burners rated at 7.86 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E2.
- (c) One (1) reverberatory melt furnace identified as A3 with a maximum melt capacity of 6.0 tons of aluminum per hour, to be installed in 2003, equipped with two (2) natural gas fired burners rated at 24.0 MMBtu per hour total, exhausting through one (1) stack identified as E-3.
- (d) One (1) reverberatory melt furnace identified as A4 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-4.
- (e) One (1) reverberatory melt furnace identified as A5 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with two (2) natural gas fired burners rated at 6.7 MMBtu per hour total, exhausting through one (1) stack identified as E-5.
- (f) One (1) reverberatory melt furnace identified as A6 with a maximum melt capacity of 1.25 tons of aluminum per hour, equipped with three (3) natural gas fired burners rated at 10.05 MMBtu per hour total, exhausting through one (1) stack identified as E-6.
- (g) One (1) reverberatory melt furnace identified as A7 with a maximum melt capacity of 1.0 ton of aluminum per hour, equipped with two (2) natural gas fired burners rated at 5.2 MMBtu per hour total, exhausting through one (1) stack identified as E-7.
- (h) One (1) reverberatory melt furnace identified as A8 with a maximum melt capacity of 0.25 tons of aluminum per hour, equipped with one (1) natural gas fired burner rated at 2.5 MMBtu per hour, exhausting through one (1) stack identified as E-8.
- (i) One (1) reverberatory melt furnace identified as A9 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with four (4) natural gas fired burners rated at 10.6 MMBtu per hour total,

- exhausting through one (1) stack identified as E-9.
- (j) One (1) reverberatory melt furnace identified as A10 with a maximum melt capacity of 2.5 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 9.0 MMBtu per hour total, exhausting through one (1) stack identified as E-10.
- (k) One (1) reverberatory melt furnace identified as A11 with a maximum melt capacity of 0.9 tons of aluminum per hour, equipped with six (6) natural gas fired burners rated at 15.9 MMBtu per hour total, exhausting through one (1) stack identified as E-11.
- (l) One (1) reverberatory melt furnace identified as A12 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 million British thermal units (MMBtu) per hour total, exhausting through one (1) stack identified as E-12.
- (m) One (1) reverberatory melt furnace identified as A13 with a maximum melt capacity of 3.5 tons of aluminum per hour, installed in June 1998, equipped with two (2) natural gas fired burners rated at 12.5 MMBtu per hour total, exhausting through one (1) stack identified as E-13.

The following insignificant activities, as defined in 326 IAC 2-7-1(21):

Source aluminum casting operations:

- (a) **Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour, using holding furnaces listed in paragraph (d).**
- (b) **Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (d).**
- (c) **Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour, using holding furnaces listed in paragraph (d).**
- (d) **Holding furnaces used in source casting operations, including:**
 - (1) **Twenty-nine (29) "basic holding furnaces" performing additional molten metal degassing and rotofluxing as needed, including:**
 - (A) **Four (4) natural gas-fired holding furnaces respectively identified as S1 through S4, each with a maximum heat input rating of 5.8 MMBtu per hour and a nominal holding capacity of 5,000 pounds molten metal;**
 - (B) **One (1) natural gas-fired holding furnace identified as H1 with a maximum heat input rating of 1.48 MMBtu per hour and a nominal holding capacity of 7,000 pounds molten metal;**
 - (C) **Six (6) natural gas-fired holding furnaces respectively identified as Pots 7A, 7B, 8, 9, 44 and 45, each with a maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,000 pounds molten metal;**
 - (D) **Eight (8) natural gas-fired holding furnaces respectively identified as Pots 15 through 20, 30 and 31, each with a total maximum heat input rating of 0.5 MMBtu per hour and a nominal holding capacity of 1,500 pounds molten metal;**
 - (E) **Ten (10) electric holding furnaces respectively identified as Pots 34 through 43, each with a nominal holding capacity of 2,000 pounds molten metal.**
 - (2) **Three (3) "special holding furnaces" as follows:**
 - (A) **One (1) electric holding furnace, identified as SP1, with a total nominal holding capacity of 7,000 pounds molten metal and consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot; and**
 - (B) **Two (2) electric holding furnaces, identified as SP2 and SP3, each with a nominal holding capacity of 14,000 pounds molten metal and each consisting of a receiving-holding pot, an electric heat transfer, and a pouring-holding supply pot.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8][40 CFR 63, Subpart RRR]

The **Permittee shall limit** flux usage ~~in furnaces A1 through A13~~ shall be limited as follows:

(a) For chlorine-based fluxing:

- (1) The total hexachloroethane input usage at ~~furnaces A1 through A13~~ **the source, including all reverberatory and holding furnaces**, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (2) Hydrochloric acid (HCl) emissions from each furnace shall not exceed 0.924 pounds of HCl emitted per pound of hexachloroethane used, based on complete chemical conversion of chlorine in the hexachloroethane to HCl emitted.

This material usage limit is equivalent to limiting single HAP (as HCl) emissions to less than 10 tons per year.

(b) For fluorine-based fluxing:

- (1) The total SF-350 type flux input usage at ~~furnaces A1 through A13~~ **the source, including all reverberatory and holding furnaces**, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
- (2) Hydrogen fluoride (HF) emissions from each furnace shall not exceed 0.2276 pounds of HF emitted per pound of flux used, based on a maximum of 21.614 weight percent fluorine in the flux and complete chemical conversion of fluorine in the flux to HF emitted. Any change that increases the fluorine content in the flux shall require OAQ approval prior to making such a change.

This material usage limit is equivalent to limiting single HAP (as HF) emissions to less than 10 tons per year.

- (c) These usage limits are required to limit the potential to emit of a single HAP to less than 10 tons per twelve (12) consecutive month period. Compliance with (a) and (b) of this condition shall also limit the source-wide potential to emit combined HAPs to less than 25 tons per 12 consecutive month period. Compliance with this condition shall satisfy the requirements of 326 IAC 2-8-4 and the area source definition of 40 CFR 63, Subpart A.

D.1.3 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the facilities **listed below** shall be limited as follows: **specified when operating at the respective process weight:**

- (1) ~~The facility identified as A1 shall not exceed 10.08 pounds per hour when operating at a process weight rate of 3.83 tons per hour.~~

- (2) ~~The facility identified as A2 shall not exceed 9.09 pounds per hour when operating at a process weight rate of 3.28 tons per hour.~~

- (3) The facility identified as A3 shall not exceed 13.62 pounds per hour when operating at a process weight rate of 6.0 tons per hour.
- (4) The facility identified as A4 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour.
- (5) The facility identified as A5 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour.
- (6) The facility identified as A6 shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour.
- (7) The facility identified as A7 shall not exceed 4.10 pounds per hour when operating at a process weight rate of 1.0 tons per hour.
- (8) The facility identified as A8 shall not exceed 1.08 pounds per hour when operating at a process weight rate of 0.25 tons per hour.
- (9) The facility identified as A9 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.5 tons per hour.
- (10) The facility identified as A10 shall not exceed 7.58 pounds per hour when operating at a process weight rate of 2.5 tons per hour.
- (11) The facility identified as A11 shall not exceed 3.82 pounds per hour when operating at a process weight rate of 0.9 tons per hour.
- (12) The facility identified as A12 shall not exceed 9.49 pounds per hour when operating at a process weight rate of 3.5 tons per hour.
- (13) The facility identified as A13 shall not exceed 9.49 pounds per hour when operating at a process weight rate of 3.5 tons per hour.

Emission Unit/Activity	Process Weight Rate (tons/hr)	Allowable Particulate Emission Rate (lb/hr) (326 IAC 6-3-2)
reverberatory furnace A1	3.83	10.08
reverberatory furnace A2	3.28	9.09
reverberatory furnace A3	6.00	13.62
reverberatory furnace A4	1.25	4.76
reverberatory furnace A5	1.25	4.76
reverberatory furnace A6	1.25	4.76
reverberatory furnace A7	1.00	4.10

reverberatory furnace A8	0.25	1.08
reverberatory furnace A9	2.50	7.58
reverberatory furnace A10	2.50	7.58
reverberatory furnace A11	0.90	3.82
reverberatory furnace A12	3.50	9.49
reverberatory furnace A13	3.50	9.49
pouring and casting operation for furnaces A1 through A11 (excluding A3)	18.01	28.44
FLCA pouring and casting operation for furnace A3	6.00	13.61
ME Cell pouring and casting operation for furnaces A12 & A13	7.00	15.10

- (b) The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.4 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the **reverberatory and holding furnaces, each as a Group 1 furnace**, except when otherwise specified in 40 CFR Part 63, Subpart RRR. These requirements become applicable to ~~the all Group 1 reverberatory~~ furnaces, excluding A3, on March 24, 2003. These requirements become applicable to reverberatory furnace A3 upon startup. Compliance with D.1.2 makes this source an area source under Clean Air Act Section 112. Therefore, only the area source requirements of Subpart RRR apply to these facilities.

D.1.6 Secondary Aluminum ~~Smelting~~ **Production** Limits [40 CFR Part 63.1500 (Subpart RRR)]

Effective March 23, 2004 for reverberatory furnaces A1, A2, ~~and A4~~ through A13, **and each natural gas fired and electric holding furnace**; and upon startup for reverberatory furnace A3, and pursuant to 40 CFR 63.1505(k)(3) ~~and (5)~~, the Permittee shall comply with the following emission limitations:

- (a) **Pursuant to 40 CFR 1505(k)(3), for each secondary aluminum processing unit**, the Permittee shall not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of total tetra-, penta-, hexa-, and octachlorinated dibenzo dioxins and furans (D/F) in excess of:

$$L_{cDF} = \frac{\sum_{i=1}^n (L_{tiDF} T_{ti})}{\sum_{i=1}^n (T_{ti})}$$

where L_{tiDF} = The D/F emission limit for individual ~~emission unit~~ **Group 1 furnace “i”**, in the secondary aluminum processing unit ~~and~~.

~~L_{cDF} = The D/F emission limit for secondary aluminum processing unit.~~

~~The D/F emission limit (L_{cDF}) for a Group 1 furnace without an in-line fluxer (reverberatory furnaces A1 through A13) at a secondary aluminum production facility. This limit shall be 15 Fg of D/F TEQ per Mg (2.1×10^{-4} gr of D/F TEQ per ton) of feed/charge or per ton of aluminum produced **for each Group 1 furnace (i.e., each of the reverberatory and holding furnaces)**, where TEQ is the toxicity equivalents for dioxins and furans as defined in “Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update”; [40 CFR 63.1503][40 CFR 63.1505(i)][40 CFR 63.1505(k)]~~

T_{ti} = the feed/charge rate for individual Group 1 furnace “i”; and

L_{cDF} = The D/F emission limit for each secondary aluminum processing unit.

- (b) ~~Identification, emission limits and means of compliance shall be posted on each furnace. Pursuant to 40 CFR 63.1505(k)(5), the Permittee may demonstrate compliance with the emission limits of paragraph (a) by demonstrating that each Group 1 furnace in the secondary aluminum processing unit is in compliance with the applicable emission limit for an individual Group 1 furnace specified as L_{tiDF} in paragraph (a) of this condition.~~
- (c) **With prior approval from IDEM, Permittee may redesignate any existing Group 1 furnace at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of 40 CFR Part 63, Subpart RRR and will be irreversible.**

D.1.7 Labeling [40 CFR Part 63.1506(b)]

The Permittee shall provide and maintain easily visible labels that shall be posted at ~~the~~ each **reverberatory and holding** furnace. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) The type of affected source or emission unit (e.g., group 1 furnace, group 2 furnace, in-line fluxer); and

- (b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

D.1.8 Operation, Maintenance, and Monitoring (OM&M) Plan [40 CFR Part 63.1510(b)]

The Permittee shall prepare and implement a written Operation, Maintenance, and Monitoring (OM&M) plan for each **reverberatory and holding** furnace and shall submit the plan to IDEM, OAQ, for review and approval. The OM&M plan shall be submitted by the compliance date established at **40 CFR Part § 63.1501(a)** for the existing furnaces, and within ninety (90) days of the successful initial performance test for new furnace A3. ~~Any subsequent changes to the plan shall be submitted to IDEM, OAQ, for review and approval. Pending approval of the initial or amended plan, the Permittee shall comply with the conditions of the submitted plan. The plan shall include the following information [63.1510(b)]:~~ **The plan must be accompanied by a written certification by the Permittee that the OM&M plan satisfies all requirements of 40 CFR Part 63.1510 and is otherwise consistent with the requirements of 40 CFR Part 63, Subpart RRR. The Permittee must comply with all of the provisions of the OM&M plan as submitted to IDEM, unless and until the plan is revised in accordance with the following procedures. If IDEM determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of 40 CFR Part 63.1510 or Subpart RRR, the Permittee must promptly make all necessary revisions and resubmit the revised plan. If the Permittee determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the Permittee submits a description of the changes and a revised plan incorporating them to IDEM. Each plan must contain the following information:**

- (a) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (b) A monitoring schedule for each affected source and emission unit.
- (c) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in **40 CFR Part §63.1505**.
- (d) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
 - (1) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (2) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in **40 CFR 63, Subpart A of this part**.
- (e) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (f) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph ~~(b)(1)~~ **(a)** of this ~~section~~ **condition**, including:

- (1) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
- (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (g) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (h) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in **40 CFR Part § 63.1510(o)** for each group 1 furnace not equipped with an add-on air pollution control device (i.e., **reverberatory** furnaces A1 through A13 **and the holding furnaces**).

D.1.9 Site-Specific Monitoring Plan [40 CFR Part 63.1510(o)]

The Permittee shall develop, in consultation with IDEM, OAQ, a written site-specific monitoring plan for each furnace not equipped with an add-on air pollution control device (i.e., reverberatory furnaces A1 through A13 **and the holding furnaces**). The site-specific monitoring plan shall be submitted to IDEM, OAQ, as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of D/F and the proposed monitoring parameters for that pollutant. Test data must establish the highest level of D/F that will be emitted from each furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If IDEM, OAQ, determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the Permittee must promptly make all necessary revisions and resubmit the revised plan to IDEM, OAQ. The site-specific monitoring plan shall include the following information:

- (a) Each site-specific monitoring plan shall document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
- (b) Each site-specific monitoring plan shall include provisions for unit labeling as required in **40 CFR Part § 63.1510(c)**, feed/charge weight measurement (or production weight measurement) as required in **40 CFR Part § 63.1510(e)**, and flux weight measurement as required in **40 CFR Part § 63.1510(j)**.
- (c) If a continuous emission monitoring system is included in a site-specific monitoring plan, the plan shall include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of the general provisions in 40 CFR 63, Subpart A.
- (d) If a continuous opacity monitoring system is included in a site-specific monitoring plan, the plan shall include provisions for the installation, operation, and maintenance of the system to provide quality-assured measurements in accordance with all applicable requirements of this subpart.

- (e) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan shall include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in **40 CFR Part § 63.1510(p)**.
- (f) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan shall include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in **40 CFR Part § 63.1510(q)**.

D.1.11 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.3, the following shall apply:

- (a) For purposes of PM and PM10 compliance stack testing, the thirteen (13) furnaces at this source are grouped as follows:

Group A:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A8	0.25	2.5 (1 burner)
A11	0.9	15.9 (6 burners, total)
A7	1.0	5.2 (2 burners, total)

Group B:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A4	1.25	10.05 (3 burners, total)
A5	1.25	6.7 (2 burners, total)
A6	1.25	10.05 (3 burners, total)

Group C:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A9	2.5	10.6 (4 burners, total)
A10	2.5	9.0 (6 burners, total)
A2	3.28	9.2 (4 burners, total)
A12	3.5	12.5 (2 burners, total)

Group D:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A13	3.5	12.5 (2 burners, total)
A1	3.83	9.2 (4 burners, total)
A3	6.0	24.2 (2 burners, total)

- (b) ~~Within ninety (90) days after issuance of this Significant Permit Revision No. 033-17746-00016,~~ The Permittee shall perform PM and PM10 testing on one (1) furnace from each of Groups A, B, C and D **by March 31, 2004**. The tests shall be conducted during metal melting and metal fluxing utilizing methods as approved by the Commissioner. This test shall be repeated every twenty-one (21) months from the date of the prior valid compliance demonstration, but shall not be repeated on any one (1) furnace in a group until all furnaces in the respective group are tested. The first complete test of all furnaces in Groups B and C shall not include furnaces A5 and A9, respectively.

D.1.12 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11][40 CFR 63, Subpart RRR]

In order to demonstrate compliance with Condition D.1.6 and **40 CFR 63**, Subpart RRR, the Permittee shall:

- (a) **For existing reverberatory furnaces**, perform D/F testing ~~within ninety (90) days after startup of new furnace A3, and by the 40 CFR Part § 63.1501(a) compliance date (i.e., March 24, 2003), for existing furnaces A1, A2, and A4-A13; and no later than one-hundred eighty (180) days after initial startup for new facilities~~, all in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Commissioner to measure the concentration of D/F. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) ~~The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met [40 CFR 63.1511(g)].~~
For existing holding furnaces, perform D/F testing by the 40 CFR Part 63.1501(a) compliance date (i.e., March 24, 2003), and no later than one-hundred eighty (180) days after initial startup for new facilities, in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Commissioner to measure the concentration of D/F. Testing shall be conducted in accordance with Section C - Performance Testing.
- (c) ~~With the prior approval of the permitting authority~~ **IDEM**, the Permittee may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied [40 CFR 63.1511(f)]:
 - (1) The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;
 - (2) The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;
 - (3) The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;
 - (4) The tested emission unit must be of the same design as the emission units that it represents; and
 - (5) The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.

- (d) **The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. To establish the minimum or maximum value or range, the Permittee shall use the appropriate procedures in 40 CFR 63.1511(g) and submit the information required by 40 CFR 63.1515(b)(4) in the notification of compliance status report. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met. [40 CFR 63.1511(g)]**
- (e) **Pursuant to 40 CFR 63.1512(e), the site-specific monitoring plan required by 40 CFR 63.1510(o) and Condition D.1.10 shall include data and information demonstrating compliance with the applicable emission limits for each Group 1 furnace (i.e., each reverberatory and holding furnace).**
- (f) **Pursuant to 40 CFR 63.1512(j), the results of the performance tests required by paragraph (a) of this condition shall be used to establish emission rates in Fg TEQ/Mg of feed/charge for D/F emissions from each emission unit. These emission rates are used for compliance monitoring in the calculation of the 3-day, 24-hour rolling average emission rates using the equation in 40 CFR 63.1510(t).**
- (g) **Pursuant to paragraphs (k) and (n) of 40 CFR 63.1512, during the performance tests the Permittee shall comply with the requirements and use the procedures in these sections of 40 CFR 63.1512 respectively for:**
 - (1) **Measuring or otherwise determining feed/charge weight to the affected emission unit (i.e., each of the reverberatory and holding furnaces); and**
 - (2) **Establishing an operating parameter value or range for the total reactive chlorine flux injection rate.**
- (h) **Pursuant to Paragraphs (b), (d), and (e) of 40 CFR 63.1513, the Permittee shall comply with the requirements and use the applicable equations, references, and/or procedures in these sections of 40 CFR 63.1513 respectively for:**
 - (1) **Determining compliance with an emission limit for D/F;**
 - (2) **Conversion of D/F measurements to TEQ units; and**
 - (3) **Determining compliance with emission limits for a secondary aluminum processing unit.**

D.1.14 Secondary Aluminum Smelting Compliance Determination [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1510, the following conditions shall apply to each reverberatory **and holding** furnace:

- (a) **For each furnace, the Permittee shall [63.1506(m)]:**
 - (1) **Maintain the total reactive flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.**

- (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the Operation, Maintenance, and Monitoring (OM&M) plan and within the parameter values or ranges established in the OM&M plan.
- (b) Pursuant to **40 CFR 63.1510(j)**, for each furnace the Permittee shall comply as follows:
 - (1) ~~Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or reactive liquid flux injected into each furnace.~~
 - (A) ~~The monitoring system must record the weight for each fifteen (15) minute period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.~~
 - (B) ~~The accuracy of the weight measurement shall be within one (1) percent of the weight of the reactive component of the flux being measured. The Permittee may apply to IDEM, OAQ, to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of within one (1) percent accuracy impracticable.~~
 - (C) ~~The Permittee shall verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six (6) months.~~
 - (2) ~~Calculate and record the flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in 40 CFR 63.1512(e).~~
 - (3) Record, for each fifteen (15) minute time period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of reactive flux.
 - (4)(2) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test **using the procedure in 40 CFR 63.1512(o).**
 - (3) **The Permittee may apply to IDEM for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.**
- (c) Pursuant to 40 CFR 63.1510(s)(1), the Permittee shall include, within the OM&M plan prepared in accordance with 40 CFR 63.1510(b), the following information:
 - (1) The identification of each emission unit in the secondary aluminum processing unit (SAPU);

- (2) The specific control technology or pollution prevention measure to be used for each emission unit in the SAPU and the date of its installation or application;
 - (3) The emission limit calculated for each SAPU and performance test result with supporting calculations demonstrating initial compliance with each applicable emission limit;
 - (4) Information and data demonstrating compliance for each emission unit with all applicable design equipment work practice or operational standards of Subpart RRR; and
 - (5) The monitoring requirements applicable to each emission unit in a SAPU and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in 40 CFR 63.1510(t).
- (d) The SAPU compliance procedures within the OM&M plan shall not contain any of the information provided in 40 CFR 63.1510(s)(2)(i) through (iv). [40 CFR 63.1510(s)(2)]
- (e) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the ~~owner or operator~~ **Permittee** must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions. [40 CFR 61.1510(s)(3)]

D.1.16 Labeling [40 CFR Part 63.1510(c)]

The Permittee shall inspect the labels for each furnace **required by Condition D.1.7** at least once per calendar month to confirm that posted labels as required by the operational standard in **40 CFR Part § 63.1506(b)** are intact and legible. ~~§ 63.1510(e)~~.

D.1.17 Feed/Charge Determination [40 CFR Part 63.1510(e)]

The Permittee shall install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, each furnace over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. **As an alternative to a measurement device, the Permittee may use a procedure acceptable to IDEM to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.**

- (a) The accuracy of the weight measurement device or procedure must be ± 1 percent of the weight being measured. **The Permittee may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the Permittee provides assurance through data and information that the affected source will meet the relevant emission standard.**
- (b) **The Permittee must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.**

D.1.18 Corrective Action [40 CFR Part 63.1506(p)]

When a process parameter deviates from the value or range established during the performance test and incorporated in the Operation, Maintenance, and Monitoring Plan, the Permittee shall initiate corrective action. The corrective action shall restore operation of the affected emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of the deviation [~~§63.1506(p)~~].

D.1.19 Compliance Monitoring Requirements [40 CFR Part 63.1510(t)] [40 CFR Part 63.1510(u)]

Pursuant to 40 CFR Subpart RRR, on and after the compliance date, the Permittee shall monitor all emission units and control equipment according to the following requirements [**40 CFR Part § 63.1510(a)**]:

- (a) The Permittee shall calculate and record the 3-day, 24- hour rolling average emissions of D/F for each furnace on a daily basis. To calculate the 3-day, 24-hour rolling average, the Permittee shall [**40 CFR Part § 63.1510(t)**]:
 - (1) Calculate and record the total weight of material charged to each furnace for each twenty-four- (24-) hour day of operation using the feed/charge weight data collected as required under Subpart RRR. **If the Permittee chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.**
 - (2) To provide emissions for each furnace for the twenty-four- (24-) hour period, in pounds: multiply the total feed/charge weight to the furnace or the weight of aluminum produced by the furnace for the twenty-four- (24-) hour period, by the emission rate (in lb/ton of feed/charge) for that furnace (as determined during the emission test).
 - (3) **Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.**
 - (4) **Compute the 24-hour daily emission rate using the following equation:**

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n (T_i)}$$

where,

E_{day} = The daily D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

T_i = The total amount of feed, or aluminum produced, for emission unit "i" for the 24-hour period (tons);

ER_i = The measured emission rate for emission unit "i" as determined in the performance test (lb/ton or $\mu\text{g}/\text{Mg}$ of feed/charge); and

n = The number of emission units in the secondary aluminum processing unit.

- (5) Calculate and record the three- (3-) day, twenty-four- (24-) hour rolling average for each pollutant each day by summing the daily emission rates for D/F over the three (3) most recent consecutive days and dividing by three (3).

- (b) As an alternative to the procedures in (a) above, the Permittee may demonstrate through performance tests, that each individual furnace **within the secondary aluminum production unit** is in compliance with the applicable emission limit [40 CFR 63.1510(u)].

D.1.20 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) and (3) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Total aluminum produced in furnaces A2, A3, A4, A6, A7, A8, and A10 - A12 for each month; and
 - (3) Total aluminum produced in furnaces A1, A5, A9, and A13 for each month.
- (b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) and (4) below. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) Calendar dates covered in the compliance determination period;
 - (2) Total hexachloroethane input usage at ~~furnaces A1 through A13~~ **the source** for each month;
 - (3) Total SF-350 type flux input usage at ~~furnaces A1 through A13~~ **the source** for each month; and
 - (4) The total weight of HCl and HF, each as a single HAP, emitted for each compliance period. This determination shall be based on complete (100%) chemical conversion of chlorine in the hexachloroethane in the flux to HCl emitted, and complete (100%) chemical conversion of fluorine in the flux to HF emitted based on 21.614 weight percent fluorine in the flux.

- (c) To document compliance with Condition D.1.15, the Permittee shall maintain records of once per shift visible emission notations of the reverberatory melt furnace exhaust stacks.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.21 Secondary Aluminum Production Record Keeping Requirements [40 CFR Part 63, Subpart RRR]

Pursuant to 40 CFR Part 63.1517, the Permittee shall:

- (a) As required by 40 CFR 63.10(b), the Permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and **40 CFR Part 63, Subpart RRR**.
- (b) The Permittee shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (c) The Permittee may retain records on microfilm, computer disks, magnetic tape, or microfiche; and report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.
- (d) In addition to the general records required by 40 CFR 63.1510(b), the Permittee of an affected unit, including an emission unit in a secondary aluminum processing unit (i.e., furnaces A1 through A13 **and each holding furnace**) must maintain records of:
 - (1) For each group 1 furnace at this source, records of 15-minute block average weights of ~~gaseous or liquid reactive flux injection~~, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of ~~gaseous, liquid or solid~~ reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
 - (2) For each continuous monitoring system, records required by 40 CFR 63.10(c).
 - (3) For each furnace as a unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
 - (4) Approved site-specific monitoring plan for each furnace, as a group 1 furnace without an add-on pollution control device, with records documenting conformance with the plan.
 - (5) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
 - (6) Records for any approved alternative monitoring or test procedure.
 - (7) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

- (A) Startup, shutdown, and malfunction plan;
 - (B) For major sources, OM&M plan; and
 - (C) Site-specific secondary aluminum processing unit emission plan.
- (8) For each ~~furnace~~ **secondary aluminum processing unit**, records of total charge weight, **or if the Permittee chooses to comply on the basis of aluminum production, total aluminum produced** for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

D.1.22 Secondary Aluminum Production ~~Record-Keeping~~ **Reporting** Requirements [40 CFR Part 63, Subpart RRR]

- (a) Pursuant to 40 CFR 63.1510 and 63.1516, the Permittee shall provide notification of the anticipated date for conducting performance tests. The Permittee shall notify IDEM, OAQ, of the intent to conduct a performance test at least 60 days before the performance test is scheduled.
- (b) Pursuant to 40 CFR 63.1515(b), the Permittee shall submit a notification of compliance status report within 60 days after the compliance date specified in 40 CFR 63.1501, except within 90 days after conducting the initial performance test required by **40 CFR Part § 63.1511(b)** for new furnace A3. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs ~~(a)(1) through (10) of this section below~~. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the ~~owner or operator~~ **Permittee** must provide duplicate notification to the applicable Regional Administrator. If a Permittee submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:
 - (1) All information required in 40 CFR 63.9(h). The Permittee shall provide a complete performance test report for each furnace for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
 - (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system.
 - (3) Unit labeling as described in 40 CFR 63.1506(b), including process type or furnace classification and operating requirements.
 - (4) The compliant operating parameter value or range established for **each furnace as listed at Condition D.1.12(f)**, with supporting documentation and a description of the procedure used to establish the value ~~(e.g., total reactive chlorine flux injection rate)~~, including the operating cycle or time period used in the performance test.

- (5) If applicable, design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in 40 CFR 63.1506(c).
 - (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in 40 CFR 63.1510(f).
 - (7) Approved OM&M plan.
 - (8) Startup, shutdown, and malfunction plan, with revisions.
- (c) The Permittee shall develop and implement a written plan that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The Permittee shall also keep records of each event as required by 40 CFR 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include [40 CFR 63.1516(a)]:
- (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
 - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (d) The Permittee shall submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in 40 CFR 63.10(c). When no deviations of parameters have occurred, the ~~owner or operator~~ **Permittee** must submit a report stating that no excess emissions occurred during the reporting period [40 CFR 63.1516(b)].

A report must be submitted if any of these conditions occur during a 6-month reporting period:

- (1) An excursion of a compliant process or operating parameter value or range, **as listed at Condition D.1.12((f))** (~~e.g., total reactive chlorine flux injection rate, definition of acceptable scrap, or other approved operating parameter~~).
- (2) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in 40 CFR 63.6(e)(3).
- (3) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of **40 CFR 63, Subpart RRR**.
- (4) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.

- (e) The Permittee shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested [40 CFR 63.1516(b)].
- (f) For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the Permittee shall certify continuing compliance based upon, but not limited to, the following conditions [40 CFR 63.1516(c)]:
 - (1) Any period of excess emissions, as defined in the semiannual report, that occurred during the year were reported as required by this subpart; and
 - (2) All monitoring, record keeping, and reporting requirements were met during the year.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Descriptions [326 IAC 2-8-4(10)]: The following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection trim material recovery device such as a bag filter or cyclone, including:
 - (1) two (2) sawing and trimming operations for furnaces A1 through A13, excluding A3, individually identified as C-1 and C-2, processing up to a total of 3.8 tons aluminum per hour; and
 - (2) sawing and trimming operation for furnace A3 processing up to 3.0 tons aluminum per hour,utilizing two (2) cyclones for particulate matter control each exhausting through one (1) stack respectively identified as E-14 and E-15.
- ~~(c) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day:~~
 - ~~(1) Aluminum pouring and casting operations for furnaces A1 through A11, excluding A3, rated at 18.01 tons of melted aluminum per hour.~~
 - ~~(2) Aluminum pouring and casting operation for furnace A3, identified as FLCA, rated at 6.0 tons of melted aluminum per hour.~~
 - ~~(3) Aluminum pouring and casting operation for furnaces A12 and A13, identified as ME Cell, rated at 7.0 tons of melted aluminum per hour.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing and trimming operations identified as C-1 and C-2 shall not exceed 10.0 pounds per hour when operating at a process weight rate of 3.8 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sawing and trimming operation for furnace A3 shall not exceed 8.6 pounds per hour when operating at a process weight rate of 3.0 tons per hour.

~~(c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the pouring and casting operation for furnaces A1 through A11, excluding A3, shall not exceed 28.4 pounds per hour when operating at a process weight rate of 18.01 tons per hour.~~

~~(d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the FLCA pouring and casting operation shall not exceed 13.6 pounds per hour when operating at a process weight rate of 6.0 tons per hour.~~

~~(e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the ME Cell pouring and casting operation shall not exceed 15.1 pounds per hour when operating at a process weight rate of 7.0 tons per hour.~~

~~(f)~~(c) The pounds per hour allowable particulate emission rates were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Citation ~~Bohn Aluminum~~ Corporation
Source Address: ~~6378 U.S. Highway 6 West~~ **600 West Main Street**, Butler, IN 46721
Mailing Address: ~~6378 U.S. Highway 6 West~~ **600 West Main Street**, Butler, IN 46721
FESOP No.: F033-7938-00016
Facility: ~~Reverberatory melt furnaces A1 through A13~~ **All reverberatory and holding furnaces**
Parameter: Hexachloroethane input usage in the fluxing process; and SF-350 type flux input usage
Limit: (a) For chlorine-based fluxing:
The total hexachloroethane input usage at ~~furnaces A1 through A13~~ **the source, including all reverberatory and holding furnaces**, shall not exceed 21,645 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.
(b) For fluorine-based fluxing:
The total SF-350 type flux input usage at ~~furnaces A1 through A13~~ **the source, including all reverberatory and holding furnaces**, shall not exceed 82,425 pounds per twelve (12) consecutive month period with compliance demonstrated at the end of each month.

YEAR: _____

Month	Furnace A1-A13 Material Flux Input Usage at Source This Month (tons)		Furnace A1-A13 Material Flux Input Usage at Source Previous 11 Months (tons)		12 Month Furnace A1-A13 Material Flux Input Usage at Source (tons)	
	hexachloroethane	SF-350 flux	hexachloroethane	SF-350 flux	hexachloroethane	SF-350 flux
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	Citation Bohn Aluminum Corporation
Source Location:	6378 U.S. Highway 6 West, Butler, Indiana 46721
County:	DeKalb
SIC Code:	3365,3363,3341
Operation Permit No.:	F033-7938-00016
Operation Permit Issuance Date:	January 26, 1999
Significant Permit Revision No.:	033-17746-00016
Permit Reviewer:	Michael Hirtler / EVP

The Office of Air Quality (OAQ) has reviewed a revision application from Citation Bohn Aluminum Corporation relating to the operation of their secondary aluminum foundry and die casting source.

History

On July 28, 2003, Citation Bohn Aluminum Corporation submitted an application to the OAQ requesting approval for a revision to the stack testing condition established in Significant Permit Revision (SPR) No. 033-16754-00016, issued on June 24, 2003. Citation Bohn Aluminum Corporation was issued FESOP No. 033-7938-00016 on January 26, 1999.

The stack testing condition of SPR No. 033-16754 requires the Permittee to test each of the thirteen (13) reverberatory furnaces for emissions of PM and PM10 to demonstrate compliance with applicable emission limits established in the SPR. The condition also requires the same furnaces be tested for emissions of dioxin/furan (D/F) to demonstrate compliance with applicable limits established at 40 CFR 63, Subpart RRR, as contained in the SPR. As an alternative to this requirement, the Permittee is requesting herein that all thirteen (13) reverberatory melt furnaces at this source be grouped into three (3) categories according to their melt capacities, and that a representative furnace for each group be subject to the emissions testing. The representative furnace is proposed as the largest furnace in a group, given that the furnaces use a common raw material supplier, and they operate with similar burner configurations, batch melt times and fluxing procedures, and differ generally in batch scrap melt volume (i.e., capacity). This scheme has been proposed to reduce the extensive time and cost needed to comply with the current test requirement.

Upon considering this request, IDEM has decided to approve changes to the existing testing requirements for this source. IDEM believes, however, that all furnaces must be tested for emissions of PM/PM10. As established in prior permitting, the furnaces are uncontrolled and have a potential to emit particulate greater than that allowed pursuant to 326 IAC 6-3-2. That notwithstanding, IDEM recognizes both the time and expense associated with the current requirement, and the source testing requirements are modified as described below.

- (a) For purposes of PM/PM10 compliance stack testing, the thirteen (13) furnaces at this source are grouped as follows:

Citation Bohn Aluminum Corp.
Butler, Indiana
Permit Reviewer: MH/EVP

Page 2 of 9
Significant Permit Revision No. 033-17746-00016

Group A:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A8	0.25	2.5 (1 burner)
A11	0.9	15.9 (6 burners, total)
A7	1.0	5.2 (2 burners, total)

Group B:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A4	1.25	10.05 (3 burners, total)
A5	1.25	6.7 (2 burners, total)
A6	1.25	10.05 (3 burners, total)

Group C:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A9	2.5	10.6 (4 burners, total)
A10	2.5	9.0 (6 burners, total)
A2	3.28	9.2 (4 burners, total)
A12	3.5	12.5 (2 burners, total)

Group D:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A13	3.5	12.5 (2 burners, total)
A1	3.83	9.2 (4 burners, total)
A3	6.0	24.2 (2 burners, total)

Since all furnaces shall be tested, failure to demonstrate compliance with the applicable PM and/or PM10 emission limit of any one (1) furnace within a group shall not be considered as a failure to demonstrate compliance for all furnaces within that group.

- (b) In order to demonstrate compliance with the applicable PM and PM10 emission limits for each furnace, testing shall be conducted on a rotating basis such that all furnaces are eventually tested. IDEM has decided to vary the time of year when such testing will take place to account for possible seasonal variability of scrap contamination; therefore, the existing repeat testing frequency of once every two and one-half (2.5) years is reduced to 21 months such that successive testing will not occur during the same calendar season. Testing shall not be repeated on any one (1) furnace in a group until all furnaces in that group have been tested. The first complete cycle of testing need not include furnaces A5 and A9 in Groups B and C, respectively, as testing of these units was conducted during September 2001 and compliance with the applicable PM and PM10 emission limits was demonstrated.
- (c) The revised testing requirement described above applies only to furnace emissions of PM and PM10. The source is required to comply with the applicable testing requirements of 40 CFR 63, Subpart RRR. This notwithstanding, IDEM is revising such requirements herein to more completely reflect the requirements of the rule. This includes incorporating the Subpart RRR provisions for testing of representative emission units, and the deletion of the existing requirement for repeat testing. Subpart RRR only requires repeat testing once every five (5) years for a source that is a major source of hazardous air pollutants, as defined at 40 CFR 63.2. Since this plant is an area source for HAP emissions, the existing condition which requires repeat testing at once every two and one-half (2.5) years is not

Citation Bohn Aluminum Corp.
Butler, Indiana
Permit Reviewer: MH/EVP

Page 4 of 9
Significant Permit Revision No. 033-17746-00016

applicable.

Existing Approvals

The source was issued FESOP No. 033-7938-00016 on January 6, 1999. The source has since received the following:

- (a) First Administrative Amendment No. 033-14004, issued on May 14, 2001.
- (b) First Significant Permit Revision No. 033-14732, issued on October 29, 2001.
- (c) Second Significant Permit Revision No. 033-14858, issued on January 4, 2002.
- (d) Third Significant Permit Revision No. 033-15396, issued on August 7, 2002.
- (e) Interim Significant Permit Revision No. I-033-16754, denied on March 20, 2003.
- (f) Fourth Significant Permit Revision No. 033-16754, issued on June 24, 2003.

Except for the interim permit denial, the source has since been operating under these approvals.

Enforcement Issue

There are no enforcement actions pending attributable to this revision request.

Stack Summary

There are no new stacks nor new equipment associated with this revision request.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 29, 2003. Additional information was received on September 23, 2003.

Emission Calculations, Potential to Emit of the Revision, and Potential to Emit of the Revision After Issuance

There are no pollutant emissions attributable to this revision request, nor is there any change in the Potential to Emit for any regulated air pollutant at this source due to this proposed revision.

Justification for Revision

The FESOP is being revised through a Significant Permit Revision pursuant to 326 IAC 2-8-11.1(g)(3), since the modification changes existing requirements for the units or process under the emissions cap.

Citation Bohn Aluminum Corp.
Butler, Indiana
Permit Reviewer: MH/EVP

Page 6 of 9
Significant Permit Revision No. 033-17746-00016

County Attainment Status

The source is located in DeKalb County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. DeKalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) DeKalb County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) Fugitive Emissions
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive particulate matter emissions are counted toward determination of PSD applicability.

Federal and State Rule Applicability

There are no changes in federal and state rule applicability for this source due to the proposed significant permit revision.

Proposed Changes to the Federally Enforceable State Operating Permit

The following changes are made as the Fifth Significant Permit Revision to FESOP No. 033-7938-00016 (new language is shown in **bold** and deleted language is shown with a ~~line through it~~):

D.1.11 Testing Requirements [326 IAC 2-8-5(a)(1),(4)]~~[326 IAC 2-1.1-11]~~

In order to demonstrate compliance with Conditions D.1.1 and D.1.3, the ~~Permittee shall perform PM and PM10 testing according to the following~~ **shall apply** schedule:

- (a) **For purposes of PM and PM10 compliance stack testing, the thirteen (13) furnaces at this source are grouped as follows:**

Group A:		
Furnace ID	Melt Rate (ton/hr)	Total Burner Rating (MMBtu/hr)
A8	0.25	2.5 (1 burner)
A11	0.9	15.9 (6 burners, total)
A7	1.0	5.2 (2 burners, total)

Group B:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A4	1.25	10.05 (3 burners, total)
A5	1.25	6.7 (2 burners, total)
A6	1.25	10.05 (3 burners, total)

Group C:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A9	2.5	10.6 (4 burners, total)
A10	2.5	9.0 (6 burners, total)
A2	3.28	9.2 (4 burners, total)
A12	3.5	12.5 (2 burners, total)

Group D:

<u>Furnace ID</u>	<u>Melt Rate (ton/hr)</u>	<u>Total Burner Rating (MMBtu/hr)</u>
A13	3.5	12.5 (2 burners, total)
A1	3.83	9.2 (4 burners, total)
A3	6.0	24.2 (2 burners, total)

- (a)(b) Within ninety (90) days after issuance of this ~~Significant Permit Revision No. 033-16754-00016~~ for furnaces A2, A4, A6, A7, A8, A10, A11, and A12; and within one hundred eighty (180) days after startup for new furnace A3; and
- (b) During the period from July 2006 to November for furnaces A1, A2, A5, A9, and A13. **Significant Permit Revision No. 033-17746-00016, the Permittee shall perform PM and PM10 testing on one (1) furnace from each of Groups A, B, C and D. The tests shall be conducted during metal melting and metal fluxing utilizing methods as approved by the Commissioner. This test shall be repeated every twenty-one (21) months from the date of the prior valid compliance demonstration, but shall not be repeated on any one (1) furnace in a group until all furnaces in the respective group are tested. The first complete test of all furnaces in Groups B and C shall not include furnaces A5 and A9, respectively.**

~~PM and PM10 testing shall be performed during metal melting and metal fluxing utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every two and one-half (2.5) years from the dates of the valid compliance demonstrations. PM-10 includes filterable and condensable PM-10. Testing shall be conducted in accordance with Section C - Performance Testing.~~

D.1.12 Testing Requirements [326 IAC 2-8-5(a)(1),(4)][326 IAC 2-1.1-11][40 CFR 63, Subpart RRR]

In order to demonstrate compliance with Condition D.1.6 and Subpart RRR, the Permittee shall:

- (a) Perform D/F testing within ninety (90) days after startup of new furnace A3, and by the § 63.1501(a) compliance date (i.e., March 24, 2003) for existing furnaces A1, A2, and A4-A13, all in accordance with the requirements in 40 CFR 63, Subpart A and 40 CFR 63, Subpart RRR. The Permittee shall use Method 23 in Appendix A to 40 CFR 60 or an alternative method approved by the Commissioner to measure the concentration of D/F. ~~Testing shall be repeated on all furnaces every two and one-half (2.5) years from the dates of the valid compliance demonstrations.~~ Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) The Permittee shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 40 CFR 63.1510 that ensures compliance with the applicable emission limit for D/F. The Permittee may use existing data in addition to the results of the performance test to establish operating parameter values for compliance monitoring provided the requirements of 40 CFR 63.1511(g) are met [40 CFR 63.1511(g)].
- (c) **With the prior approval of the permitting authority, the Permittee may utilize emission rates obtained by testing a particular type of group 1 furnace which is not controlled by any add-on control device, or by testing an in-line flux box which is not controlled by any add-on control device, to determine the emission rate for other units of the same type at the same facility. Such emission test results may only be considered to be representative of other units if all of the following criteria are satisfied [40 CFR 63.1511(f)]:**
 - (1) **The tested emission unit must use feed materials and charge rates which are comparable to the emission units that it represents;**
 - (2) **The tested emission unit must use the same type of flux materials in the same proportions as the emission units it represents;**
 - (3) **The tested emission unit must be operated utilizing the same work practices as the emission units that it represents;**
 - (4) **The tested emission unit must be of the same design as the emission units that it represents; and**
 - (5) **The tested emission unit must be tested under the highest load or capacity reasonably expected to occur for any of the emission units that it represents.**

Conclusion

This proposed revision to this secondary aluminum foundry and die casting source shall be subject to the conditions of the attached proposed Significant Permit Revision No. 033-17746-00016.